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Agricultural Memorandum No 768

Temperatures under glass cloches

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The following observations, taken during demonstrations of the effect of glass cloches, have not previously been recorded in the Ag Memo Series.

Southampton June 30 - July 1, 1950.

Mercury in steel thermometers, screened, at 6 inches above bare ground under Ganwick (rectangular) cloches and in open.

	Min		Max	
	Inside	Outside	Inside	Outside
June 30	-	-	100	76
July 1	42	39	104	77

Difference in 4in soil temperatures reported as c. 5°F (time not stated)

Reading "Midsummer" 1952.

Similar to above, but cloches over a grass surface.

	Min		Max	
	Inside	Outside	Inside	Outside
Day 1	-	-	106	99
Day 2	55	55	108	91
Day 3	53	51	107	92

Bayfordbury April 1957

Thermometers and cloches over grass, wet with some snow cover.

	Min		Max	
	Inside	Outside	Inside	Outside
April 2	-	-	61	51
April 3	26	26	61	52
April 4	40	40	61	54
April 5	42	42	69	56
April 6	39	39	52	50
April 7	46	44	66	57

Thermograph traces are held in Met O 8a.

The night minimum "protection" provided by the glass appears to vanish almost entirely over grass cover. This suggests a very small effect of glass on radiation balance at night, and emphasises the day heat storage effect of the soil.

Any comments or suggestions on this paper should be referred to the author.

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